



THE GAZETTE OF MEGHALAYA

PUBLISHED BY AUTHORITY

No. 47

Shillong, Thursday, November 21, 2019

30th Kartika, 1941 (S. E.)

Separate paging is given on this part in order that it may be filed as a separate compilation.

PART-IX

Advertisements and Notices by Government Offices and Public Service

NOTICES

STANDARD FORM OF APPLICATION

Photo

Dated.....

To,

Sir/Madam,

I beg to apply for the post of
and furnish the facts as below. In case of any false statement, I am liable to any action Govt. may deem fit
and proper. A Treasury Challan of ₹..... vide T. V. No. is attached herewith.

Signature of the applicant.

- Full name in CAPITAL LETTERS with aliases, if any, surname first (Please do not use any initials) :
.....
- Date of birth :
Year Month Date
- Place of birth :
Village/Town Police Station District
- Father's/Mother's and Husband's name (in case of married female) (Please do not use initials):
.....
- Personal description :
(a) Height : M Cm.
(b) Colour of eyes :
(c) Colour of hair :
(d) Visible distinguishing marks (if any) :
- (a) Permanent address in full:
.....
.....
(b) Present address in full:
.....
.....
.....
(c) If you have not resided at the above address continuously for the last four years, please give the
other addresses where you have resided during the period:
.....
From To Address

7. Reference:

Name and address of two responsible persons in your locality who would be prepared to vouch for you:

.....

.....

8. Are you a citizen of India? If so, how? (Copy of a citizenship Certificate should be enclosed where necessary).

.....

9. Educational and other qualifications (Please attached copies of Certificates, Mark Sheets, etc.)

Sl. No.	Name of Institution	Date of entering	Date of leaving	Examination passed	Division	Subjects taken
1	2	3	4	5	6	7
1						
2						
3						
4						
5						

10. Community:

(a) State your religion:

(b) Are you a member of Scheduled Castes/Scheduled Tribes (Answer 'Yes' or 'No'. If 'Yes' give particulars supported by a Certificate (Copy to be enclosed).

.....

11. Present occupation, if any:

12. Previous appointment held, if any:

13. Are you a temporary/retrrenched personnel of temporary Department, Govt. of Meghalaya (Answer 'YES' or 'NO'. If 'YES' give particulars):

.....

14. Are you a trained in or a member of the National Cadet Corps/Territorial Army/Scout or Guides? If so, give particulars:

.....

15. Are you married or unmarried?

Signature

NOTE:- (i) Modified *vide* Govt. O.M. No.PER(AR).123/78/143-A, dated 26th September, 2016.

(ii) Particulars are to be filled in below the Column in the space provided.

Shillong, the 29th October, 2019.

SHORT NOTICE INVITING TENDER

No.PW/CE/BD/TR/100/2019/2.- 1. Sealed tenders subsequently to be drawn up in M.P.W.D. F-2 form of Tender agreement duly affixed with a non-refundable Court Fee Stamp of ₹ 2,000/- (Rupees two thousand) only are hereby invited in 2 (two) cover Bid system *i.e.* Technical Bid and Financial Bid separately by the undersigned on behalf of the Governor of Meghalaya, from the Registered Class-I: P.W.D. (Building), Contractors/Joint Ventures of Meghalaya State having a valid Electrical License/Labour license and having requisite qualifications with experience of executing similar building for the under mentioned work and will be received in the office of the Chief Engineer, P.W.D. (Building), Meghalaya, Shillong (Room No. 417) upto 2:00 p.m. of 22nd November, 2019. The Technical Bid will be opened on the same date at 2:15 p.m. in presence of the tenderers or their authorised representatives whoso desire to attend. If the last date happens to be a holiday, the next working day will be considered as the date of receiving and opening of tenders.

Detailed tender papers may be obtained from the Technical Branch Room No. 417 of this office from the 18th November, 2019 to 20th November, 2019 on payment of ₹ 7,000.00 (Rupees seven thousand) only a non-refundable per set in cash payable to the Cashier of this office during office hours on any working day, from 11:00 a.m. upto 4:00 p.m.

2. **Name of Work:-** Proposed estimate for Expansion of Shillong District Jail at Jail Road, Shillong.
3. **Nature of Work:-** Civil works of Building Blocks etc., Civil work of Gates-4 Nos. etc., Civil work of Rain water harvesting tank etc., Civil work of providing interlock paver block, etc., Civil work of MBT of compound, etc.
4. **Approximate**
Value of Work:- ₹ 7,66,01,800.00 (Rupees seven crores sixty six lakhs one thousand eight hundred) only.
5. **Time of Completion:-** 24 (twenty four) months from the date of issue of Final Work Order.
6. **Rates:-** Rates are to be quoted on flat percentage basis *i.e.* AT PAR/ABOVE the Scheduled of Rates for 2015 - 2016 for Civil Works applicable in Khasi Hills in the State of Meghalaya, AT PAR/ABOVE the Scheduled of Rates for Electrical Works of 2016 - 2017 as applicable in the State of Meghalaya, Scheduled of Rates for Roads and Bridge works (Other than NH works) in the District of Khasi, Jaintia & Ri-Bhoi Areas of Meghalaya for the year 2015-2016 (1st Revision) for MBT for scheduled items and for additional items of work not covered by the above mentioned Scheduled of rates, on item rate basis.
5. Non-Tribal Contractors shall have to produce valid Trading License before purchasing Tender Forms failing which no tender papers will be issued.
6. Other details can be seen in the Detailed Notice Inviting Tender.
7. The Chief Engineer, P.W.D. (Building), Meghalaya, and Shillong reserves the right to accept or reject any or all tender without assigning any reason thereof.

F. MARBANIANG,
Chief Engineer, P.W.D. (Building)
Meghalaya, Shillong.

Shillong, the 29th October, 2019.

SHORT NOTICE INVITING TENDER

No.PW/CE/BD/TR/98/2019/2. - 1. Sealed tenders subsequently to be drawn up in M.P.W.D. F-2 form of Tender agreement duly affixed with a non refundable Court Fee Stamp of ₹ 2000/- (Rupees two thousand) only are hereby invited in 2 (two) cover Bid system i.e. Technical Bid and Financial Bid separately by the undersigned on behalf of the Governor of Meghalaya, from the Registered Class-I P.W.D. (Buildings), Contractors/Joint Ventures of Meghalaya State having a valid Electrical License and having requisite qualifications with experience of executing similar building for the under mentioned work and will be received in the office of the Chief Engineer, P.W.D. (Buildings), Meghalaya, Shillong (Room No. 416) upto 2:00 p.m. of 22nd November, 2019. The Technical Bid will be opened on the same date at 2:15 p.m. in presence of the tenderers or their authorised representatives whoso desire to attend. If the last date happens to be a holiday, the next working day will be considered as the date of receiving and opening of tenders.

Detailed tender papers may be obtained from the Technical Branch Room No. 417 of this office from 18th November, 2019 to 20th November, 2019 on payment of ₹ 2000.00 (Rupees two thousand) only a non-refundable per set in cash payable to the Cashier of this office during office hours on any working day, from 11:00 a.m. upto 4:00 p.m.

2. **NAME OF WORK:- "Construction of Alternative Dispute Resolution Building at Dakopgre, Tura, West Garo Hills District".**

Nature of work	Approximate value of work
i. Construction of Alternative Dispute Resolution Building including internal water supply & sanitary installation, ii. Internal Electrification Works, iii. Construction of Retaining Wall.	₹ 2,46,91,600 (Rupees two crores forty six lakhs ninety one thousand and six hundred) only.

3. **TIME OF COMPLETION:-** 24 (twenty four) months from the date of issue of Final Work Order.
4. **RATES:-** Rates are to be quoted on flat percentage basis *i.e.* AT PAR/ABOVE the Scheduled of Rates for Building Works of 2015 - 2016 as applicable in Garo Hills and AT PAR/ABOVE the Scheduled of Rates for Electrical Works of 2016 - 2017 as applicable in the State of Meghalaya.
5. Non-Tribal Contractors shall have to produce valid Trading License before purchasing Tender Forms failing which no tender papers will be issued.
6. Other details can be seen in the Detailed Notice Inviting Tender.
7. The Chief Engineer, P.W.D. (Building), Meghalaya and Shillong reserves the right to accept or reject any or all tender without assigning any reason thereof.

F. MARBANIANG,
Chief Engineer, P.W.D. (Building)
Meghalaya, Shillong.

OFFICE OF THE DIRECTOR GENERAL OF POLICE MEGHALAYA, SHILLONG

Shillong, the 29th October, 2019.**DRAFT NOTICE INVITING QUOTATIONS*****Subject:- Quotations for Procurement of CCTV Spare Parts / equipments for Shillong and Tura.***

No.PE.4/35/CCTV-TENDER/TECH/17. - The Director General of Police, Meghalaya, Shillong invites Sealed Quotations from authorized manufacturers/suppliers/dealers for the supply of CCTV Spare Parts/equipments. The details of the equipments/spare parts required along with all relevant documents of the NIQ can be downloaded from the official website i.e. www.megpolice.gov.in. The Quotations will be received in the office of the undersigned up-to 1200 hrs. on 28th November, 2019 and will be opened on the same date at 1600 hrs. Quotations received after 1200 hrs. by hand or post will stand automatically rejected.

If the date of opening of Quotations happens to be a holiday, the next working day will be reckoned as the last date of receiving and opening of the same.

Any deviations from the given specification of items will be summarily rejected.

R. CHANDRANATHAN,
Director General of Police,
Meghalaya, Shillong.

OFFICE OF THE DIRECTOR GENERAL OF POLICE MEGHALAYA, SHILLONG

Sealed QUOTATION for supply of CCTV Spare Parts/equipments for Shillong and Tura to Meghalaya Police will be received by the Assistant Inspector General of Police, (W), Meghalaya, Shillong upto 28th November, 2019 @ 1200 hrs. and will be opened on the same day at 1600 hrs. For detailed information, please contact Assistant Inspector General of Police (W), Meghalaya, Shillong during office hours in the O/o the Director General of Police, Meghalaya, Shillong-1. (All relevant documents of the NIQ can be downloaded from the official website i.e. www.megpolice.gov.in).

Assistant Inspector General of Police (W),
Meghalaya, Shillong.

Shillong, the 6th November, 2019.

No.DMR/Store/77/2005/1368. - Sealed quotations affixing ₹ 25/- Court Fee Stamp are invited for supply of Laboratory Equipment, Drilling Accessories, Survey Equipments, Tents & Tarpaulin and Photo Copier Machine so as to reach the office of the undersigned on or before 25th November, 2019 during office hours.

The cost of tender paper is ₹ 100/- for each item on payment by crossed D/D or cash in favour of Director of Mineral Resources, Shillong-793003. Self addressed stamp envelope is to be enclosed along with the request.

ARUNKUMAR KEMHAVI,
Director of Mineral Resources,
Meghalaya, Shillong.

Shillong, the 13th November, 2019.

No.SW/VEH/3/88/Pt.II/8606-8609. - Sealed quotations affixing with non-refundable Court Fee Stamp of ₹ 25/- (Rupees twenty five) only are hereby invited from the interested individuals/parties for disposal of the following condemned vehicle of the office of the undersigned where it is and as it is basis. The condemned vehicle will be offered to the highest bidder(s) above the upset price.

The sealed quotations should be accompanied with a call deposit of ₹ 5,000/- (Rupees five thousand) only duly pledged in favour of the undersigned under the sealed envelope inscribed with the bold letter "TENDER FOR CONDEMNED VEHICLE" and the call deposit shall be adjusted against the accepted price once the tender is accepted, the bidder should deposit the full value of the condemned vehicle and lifted the vehicle within 15 (fifteen) days failing which the call deposit shall be forfeited to Government.

List of condemned vehicle:-

1. ML-01-1607 (Jeep).
2. ML-01-5019 (Jeep).

The last date of receiving of Tenders is on 22nd November, 2019 at 2:00 p.m. and will be opened on the same day and hour in the presence of the tenders or authorized agents if they like to be present.

Director of Social Welfare
Meghalaya, Shillong.

**OFFICE OF THE SUPERINTENDENT OF POLICE (C) MPRO
MEGHALAYA, SHILLONG**

Shillong, the 25th October, 2019.

NOTICE INVITING TENDER

No.MPRO/PLN/06(MPFS-GEN)P-XIII-2016-19/88- A. - Sealed tender affixing non-refundable court fee stamp of Rs.1000/-(Rupees One thousand) only are invited from bonafide, established, reputed manufacturers or their authorised dealers for entering into the rate contract for supply of **“Radio Equipments”** under Modernisation Scheme 2018-19 as per specification in Annexure “C” and terms and conditions laid down in the Tender Notice

This invitation to bid is open to all Bidders meeting the eligibility / qualification criteria as mentioned in this tender document

Terms and Conditions

1. Items offered must be of reputed companies/manufacturers and should meet with all the specifications as those given in Annexure-“C”. Tender should be accompanied with catalogue, warranty/ guarantee or any related papers & will be received upto 1400 hrs. on 26th November, 2019 and will be opened on the same day at 1500 hrs. Bidders or their authorised representatives are invited at the time of opening of the tender. Tenders received after 1400 hrs. of 26th November, 2019 by hand or by post will be summarily rejected.
2. Tender must be accompanied by:-
 - (a) Affixed non-refundable court fee stamp of Rs. 1000/- (Rupees One thousand) only.
 - (b) Earnest Money calculated at the rate of 2% of the total value of the items tendered. The Earnest Money as far as practicable should be in the form of either (i) Deposit at Call or (ii) Fixed Deposit or (iii) NSC/KVP from any Nationalised bank at Shillong, pledged in favour of the the Superintendent of Police (C) MPRO, Meghalaya, Shillong. Tenderers belonging to Schedule Caste/Schedule Tribe may deposit 50% of the amount above subject to the production of such certificate.
 - (c) Recent passport size photograph of the Tenderer duly attested.
 - (d) Latest financial stability certificate from a Scheduled Bank certifying that the Tenderer is financially sound to undertake the contract.
 - (e) Valid Professional Tax certificate
 - (f) Dealership/distributorship certificate from the Principal manufacturers/ Distributors
 - (g) Attested copy of valid Trading Licence in terms of United Khasi / Jaintia & Garo Hills District Trading (By non-tribal) Regulation Act 1954 by tenderers who are required to obtain such Licence.
 - (h) Valid and current Dealer Position Licence (DPL) of the principle for trading in wireless radio equipment as issued by the Ministry of Information & Telecommunication, Govt. of India.
 - (i) Valid GST Registration Certificate alongwith the last GST return copy
 - (j) An undertaking stating that the tenderer himself/herself is satisfied with the terms &

conditions of the N.I.T. and agrees to abide by the same for this tender.

(k) Attested copy of PAN

3. The following information must be mentioned on the body of the envelop containing the quotations, failing which the sealed envelop of the quoting firm will not be opened.

- | | | |
|-----|---|----------------|
| (a) | Earnest money | - is enclosed. |
| (b) | Professional Tax certificate | - is enclosed |
| (c) | Court Fee stamp | - is enclosed. |
| (d) | Dealership certificates from Principal manufacturers / Distributors | - is enclosed |
| (e) | Trading License from KHADC/JHADC/GHADC (for non-Tribal) | - is enclosed |
| (f) | SC/ST Certificate. | - is enclosed |
| (g) | Passport size photograph | - is enclosed |
| (h) | Valid GST Registration Certificate | - is enclosed. |
| (i) | Income Tax certificate /PAN | - is enclosed |
| (j) | Latest financial stability Certificate from any recognized Bank | - is enclosed |

Failure to enclose any one of these documents or enclosure of any invalid documents will result in automatic rejection of the quotation.

4. Rates quoted

- (a) should be inclusive of all charges, like custom duty, packing, insurance, taxes and other incidental charges. However the GST of the above mentioned taxes if any should be shown separately
- (b) should be inclusive of cost of accessories.
- (c) should be valid for one calendar year from the date of acceptance of tender.
- (d) should be quoted F.O.R. destination, Shillong, door delivery Office of the Superintendent of Police (C) MPRO, Meghalaya, Shillong
- (e) Should be written clearly in figure and in words. Any alteration or overwriting must be fully signed by the tenderers.
- (f) Once the rates offered in the tender are accepted enhancement will not be entertained under any circumstances and tenderers will be liable to supply the items at the accepted rate. Failure to supply the items at the accepted rates will entail the offer being cancelled and the security money will be forfeited to the Government of Meghalaya.

5. Tender should be addressed to the undersigned by designation and not by name. Sealed envelope containing the tender must be super scribed as **“Radio Equipments”** and must be sent by register post or hand delivery

6. The Tenderers shall arrange Technical presentation and live demonstration of their system/Equipment / Items quoted within 7 (seven) days from the date of submission of quotation to show that they fully confirm to the specifications in the tender. The bidder has to bring four numbers of Digital Hand held sets, 2(two) Digital VHF Mobile sets, 2 (two) Digital Repeater sets, 2 (two) Digital HF sets, 2 (two) nos. of microwave radio license free band for repeater to repeater connectivity for the demo & field trial. The Bids of the firms/vendors who do not arrange field trial and demonstration as above will be treated as rejected.

7. The successful tenderers will be:-
- (a) Intimated by a Letter of Acceptance/Supply order by the Superintendent of Police (C) MPRO, Meghalaya, Shillong. Till then no bidder has any right to assume that his/her tender has been accepted. There shall be no claim whatsoever for compensation for any expenditure incurred by any tenderers in anticipation of acceptance letter.
 - (b) Required to furnish a security deposit as per rates mentioned below and execute the contract agreement to ensure fulfillment of the terms and conditions of the contract which successful bidder/s will have to enter into. Such security deposit will be subjected to forfeiture in case of non-fulfillment of terms and conditions of the tender notice on the contract agreement. The earnest money of the successful tenderer/s will not be released till the full security deposit is furnished. Earnest money of the successful tenderer/s will be forfeited to the Government in case of failure to furnish security money in full.
 - (c) Selected firm required to furnish Valid Trading Licence from the Khasi Hills Autonomous District Council before a final supply order is issued
8. **RATES OF SECURITY DEPOSIT**
- For contract upto Rs. 20,000/- 5% from local & 6% from non-Locals.
For contract upto Rs. 50,000/- 10% from local & 11% from non-Locals.
For contract upto Rs. 1,00,000/- 10% from local & 11% from non-Locals.
For contract over Rs. 1,00,000/- 20% for all categories
The Security Deposit should be interest free and in the form of a valid Bank Draft/Deposit at Call pledged in favour of the undersigned.
9. The Superintendent of Police (C) MPRO, may rescind forthwith the contract in writing if,
- a) A Tenderer assigns or sublets any contract in respect of contract or any other contract entered into with the Government.
 - b) Tenderer or his agent/Servant are found guilty of fraud of this contract or any other contract.
 - c) Declines, neglect or delays to comply with the demand/requisition or in any other way fails to perform or observe any of or all the conditions of the contract agreement.
In case of such rescission the Security Deposit in full shall stand forfeited and absolutely be at the disposal of the Government without prejudice to any other remedy or action that the Government shall be entitled to recover from the successful Tenderer any extra expenses Govt. may deem necessary in obtaining the supplies.
10. In the event of the successful Tenderer failing to perform his/her part of any or all the contract agreement to the satisfaction of the Department or disregarding any terms and conditions of the Tender Notice and or the contract agreement the successful Tenderer shall be liable to any of or all of the following action at the discretion of the Superintendent of Police (C) MPRO, Meghalaya, Shillong on behalf of the Government of Meghalaya.
- (i) Forfeiture of security deposit in whole or part.
 - (ii) Making good the loss caused to the Government through the liability, neglect, delay in complying with the demand.
 - (iii) Cancellation of the contract without any prior notice to the contractor.
11. If the successful Tenderer/s willfully neglects, fails to perform or observe any or all conditions of

- the contract agreement or attempts to cheat or indulge in foul practices, the Superintendent of Police (C) MPRO, Meghalaya, Shillong may impose a ban upon such Tenderer(s) for future business within the Department.
12. Quantities mentioned in the list are only illustrative and may be increased/reduced on finalisation of order depending on the availability of fund and actual requirements.
 13. Once the sample/technical specification of the items are approved, no change of brand, name, shape, pattern, quality or specifications will be entertained even on the plea of non-availability of raw materials or alternative offer of the same quality.
 14. The store, supplied must be of the same specifications, weight and quality as the tendered models/samples/Tech. Spec. If the items are rejected by the undersigned due to non-meeting of the Technical Specification the supplier must replace the rejected items at their own cost forthwith and in a period of 21 (twenty one) days from the date of rejection.
 14. Delivery must be completed within thirty days from the date of receipt of firm orders. No extension of delivery & installation period will be entertained.
 15. Payment will be made to the suppliers directly only on completion of supplies and on correct receipt of goods by the respective consignee in good condition. Documents/vouchers/ P.R. Bills etc. routed through Banks will not be accepted. Consignment will be dispatched by the firm after payment of all freight charges at the source. Freight to pay P.R. will not be accepted.
 16. Risk of transportation will be borne by the Tenderer themselves.
 17. Comprehensive on site warranty should be indicated alongwith after sale services facilities.
 18. One set of manuals of (Instructions and Maintenance) should be supplied free of cost for each item wherever applicable.
 19. The Purchase Board reserves the right to reject the lowest rate or any of the tender without assigning any reason.
 20. The Superintendent of Police (C) MPRO, Meghalaya, Shillong reserves the right to cancel the NIT floated or reject any of the tenders without assigning any reasons thereof
 21. Any dispute arising out of or in respect of these terms and conditions of the Contract Agreement shall be in the Jurisdiction of the Courts in Meghalaya.

W. NONGKYNRIH,
Superintendent of Police (C) MPRO
Meghalaya, Shillong.

Annexure - A**IMPRINT FOR PUBLICATION IN NEWSPAPERS (One Impression Only)****TENDER NOTICE**

Sealed tender affixing non-refundable court fee stamp of Rs. 1000/- (Rupees One thousand) only are invited from bonafide, established, reputed manufacturers or their authorised dealers/agents/representative for entering into the rate contract for the supply of **“Radio Equipments”**

Tender will be received upto 1400 hrs. on the 26th November, **2019** and will be opened on the same day at 1500 hrs. Detail information/related documents in connection with the tender can be collected from the office of the undersigned on any working day.

W. NONGKYNRIH,
Superintendent of Police (C) MPRO
Meghalaya, Shillong.

Annexure "B"**CERTIFICATE OF ACCEPTANCE OF TERMS AND CONDITIONS
(To be furnished along with the tender documents)**

I/We have read and fully understood the terms and conditions as laid down in the NIT Vide No. M/ No.MPRO/PLN/06 (MPFS-GEN) P-XIII-2016-19/88-A, Dated Shillong the 25th October, 2019 in respect of supply of "Radio Equipments" to the Office of the Superintendent of Police (C) MPRO, Meghalaya, Shillong due to be opened on 26th November, 2019

I/We agree to abide by the same

I/ We have signed all the pages of the tender documents as laid down.

Signature and seal of the Tenderer or
his/her Authorized signatory.

Dated.....

Name.....

Address.....

.....

Phone No.....

Annexure - C**List of Items / Equipment with Technical specifications****Quantity****I. VHF Digital Handheld Radio:****15 Nos.****1. General**

Sl. No.	Description	Required Specifications
1.1	Frequency Range	136-174 MHz
1.2	TDMA	2-Slot
DMO Mode - For TDMA dual slot without Repeater		
1.3	Channel Capacity	255 or More (Set with display) 16 Channel (Set without display).
1.4	Channel spacing	12.5 KHZ
1.5	Battery Capacity	Li-ion / Li-Poly rechargeable battery of capacity 2000 mAh or higher capacities. Complying applicable BIS Standard
1.6	Average Battery duty cycle 5/5/90	Digital : 10 Hrs or more Analog : 8 hrs or more
1.7	Frequency stability	± 1.5 PPM or better
1.8	Antenna Impedance	50Ω
1.9	Antenna	Helical Antenna
1.10	Weight	Less than 500 gm with battery
1.11	EMI/EMC	ETSI EN 301 489-1 & ETSI 301 489-5 /
1.12	Air Interface Standards	Shall be opens Standards DMR Tier – II
2. Transmitter		
2.1	RF Power output	1 to 5 Watts (Programmable)
2.2	FM Emission	11K0F3E 7K60FXE, 7K60FXD, 7K60FXW
2.3	Digital Modulation	4 FSK
2.4	Modulation Limiting	±2.5KHz at 12.5KHz
2.5	FM Hum/Noise	- 40dB or better
2.6	Adjacent Channel Power	- 60dB or better
2.7	Audio distortion	Less than 3%
2.8	Audio Response	+ 1 , -3dB
2.9	Digital Vocoder	AMBE +2
2.10	Communication Security	System should have in built encryption and should also have provision to support 3rd Party Encryption
3. RECEIVER		
3.1	Selectivity (Analog)	0.3μV(12SINAD)or better
3.2	Sensitivity (Digital)	0.3μV at 5% BER or better
3.3	Adjacent Chanel Selectivity	60dB or better
3.4	Inter modulation	70dB or better
3.5	Audio output	Minimum 500 mW
3.6	Audio Distortion	less then 3%
4. ENVIRONMENTAL		
4.1	Operating Temperature	-30°C to + 55°C
4.2	Storage Temperature	-40°C to + 70°C
4.3	Humidity	95% Max at 40°C non – condensing
4.4	Vibration	MIL-STD-810 F/G
4.5	Shock & Drop	MIL-STD-810 F/G
4.6	Water intrusion & Dust	MIL-STD-810 F/G or IP-67
4.7	Salt	MIL-STD-810 F/G
4.8	Rain	MIL-STD-810 F/G
4.9	Low Pressure	MIL-STD-810 F/G

Feature wise Configuration:**5 ACCESSORIES**

5.1	Battery Charger	
5.1.1	Input Voltage	230 V + 10%, 50 Hz
5.1.2	Output Voltage	As per battery pack (Information will be provided by OEM/Vendor)
5.1.3	Type of Battery	Li-ion/Li-Poly
	Charger	
5.1.4	Protection	1) Reverse polarity protection 2) Short circuit protection
5.1.5	Indication	Visual indication for all modes of charging status
5.1.6	Charging Time	Standard chargers - 6 to 14 Hrs., Rapid Charger - 1 to 3 Hrs
5.1.7	No. of Charging	1/2/6 (Vendor to quote accordingly)
	Pocket	
5.2	Hand free Kit (VoX unit with PTT) (Optional)	The offered sets should be compatible with any one or more of the following variants 1) Bone Conduction 2) Ear Plug 3) Headphone, etc.
5.3	Programming Kit	All necessary Software and Hardware required for programming of the set independently for lifelong support with regular updates.
5.4	Literature	a) User manual with each radio sets should be provided free of cost in soft as well as hard copy. b) Technical repairing & maintenance manual, with complete block diagram, circuit layout, PCB layout, component & wiring diagram etc. should be provided as per user's requirement in soft as well as hard copy.
5.5	No. of Battery	Two lithium - Ion or Li-polymer batteries with each radio set
5.6	Case	One good quality case with belt clip & shoulder strap to house the Radio Sets in operation

6. Configuration

6.1	Simple press to talk	
6.2	Low battery alert	
6.3	Continuous Tone Coded Squelch System (CTCSS)	
6.4	Mixed Mode Operation (Analog and Digital)	
6.5	Any one of 2 - Tone/5 - Tone/ DTMF signalling.	
6.6	Busy Channel Lockout.	
6.7	Selective call Decode / Encode.	
6.8	Capable of VOX hand free operation.	
6.9	P.T.T. ID Encode	
6.10	Chanel Scanning with call quieting facility.	
6.11	Emergency SOS/SIREN	
6.12	Talk around Mode	
6.13	Automatic Number Identification (ANI)	
6.14	Text messages and predefined message	
6.15	Should have built – in GPS feature	i) Time to First Fix (TTFF) cold start : < 2minutes ii) Time to First Fix (TTFF) bot start : < 20 seconds Horizontally accuracy : <10 meters

		Quantity 15 Nos.
II. VHF Digital Mobile Radio		
1. General		
S/No.	Description	Required Specifications
1.1	Frequency Range	136-174 MHz
1.2	TDMA	2-Slot
1.3	Channel Spacing	255 or More Channel (Set with display)
1.4	Channel spacing	12.5 KHZ
1.5	Operating Voltage	10.8 V to 15.6 V DC
1.6	Protection	1) Receiver polarity protection 2) Protection against high VSWR
1.7	Frequency stability	± 1.5 PPM or better
1.8	Antenna Impedance	50Ω
1.9	Weight	Less than 2 Kg.
1.10	EMI/EMC	ETSI EN 301 489-1 & ETSI 301 489-5 /
1.11	Air Interface Standards	Shall be open Standards DMR Tier - II
1.12	Interoperability with minimum two vendors	IOP Certification from Technical Working Group (TWG)
1.6	Average Battery dutyss cycle 5/5/90	Digital : 10 Hrs or more Analog : 8 hrs or more
1.9	Antenna	Helical Antenna
2. Transmitter		
2.1	RF Power output	5 to 25 Watts / 25 to 40 Watts (Programmable)
2.2	FM Emission	11K0F3E 7K60FXE, 7K60FXD, 7K60FXW
2.3	Digital Modulation	4 FSK
2.4	Modulation Limiting	±2.5KHz at 12.5KHz
2.5	FM Hum/Noise	- 40dB or better
2.6	Adjacent Channel Power	- 60dB or better
2.7	Audio distortion	Less than 3%
2.8	Audio Response	+ 1 , -3dB
2.9	Digital Vocoder	AMBE +2
2.10	Communication Security (Option)	System should have in built encryption and should also have provision to support 3rd Party Encryption
3. RECEIVER		
3.1	Sensitivity (Analog)	0.30μV (12 dB SINAD) or better
3.2	Selectivity (digital)	0.30μV at 5% BER or better
3.3	Adjacent Chanel Selectivity	60dB or better
3.4	Inter modulation	70dB or better
3.5	Audio output	Minimum 500 mW
3.6	Audio Distortion	less then 3%
4. ENVIRONMENTAL		
4.1	Operating Temperature	-30°C to + 55°C
4.2	Storage Temperature	-40°C to + 70°C
4.3	Humidity	95% Max at 40°C non - condensing
4.4	Vibration	MIL-STD-810 F/G
4.5	Shock & Drop	MIL-STD-810 F/G
4.6	Water intrusion & Dust	MIL-STD-810 F/G or IP-54
4.7	Salt	MIL-STD-810 F/G
4.8	Rain	MIL-STD-810 F/G
4.9	Low Pressure	MIL-STD-810 F/G

			Quantity
			4 Nos.
III. VHF DIGITAL REPEATER			
1. General			
Sl. No.	Description	Required Specifications	
1.1	Frequency Range	136-174 MHz	
1.2	TDMA	2-Slot	
1.3	Operating Mode	Dual standard (Digital & Analog)	
1.4	Operating Selection	Fully automatic for Analog & Digital	
1.5	Channel Capacity	16 or more	
1.6	Channel spacing	12.5 KHZ	
1.7	Operating Voltage	11.25 V DC and 230 V AC \pm 10%, 50 Hz	
1.8	Frequency stability	\pm 1 PPM or better	
1.9	Interface	Ethernet port for IP connectivity	
1.10	Antenna Impedance	50 Ω	
1.11	Duty Cycle	100%	
1.12	Weight	Less than 15 kg.	
1.13	Display	Indicator for Transmit & Receive	
1.14	VSWR	Better than 1.5	
1.15	Protection	Receiver polarity protection	
1.16	EMI/EMC	ETSI EN 301 489-1 & ETSI 301 489-5	
2. Transmitter			
2.1	RF Power output	25 to 50 Watts (Programmable)	
2.2	FM Emission	11K0F3E 7K60FXE, 7K60FXD, 7K60FXW	
2.3	Digital Modulation	4 FSK	
2.4	Modulation Limiting	\pm 2.5KHz at 12.5KHz	
2.5	FM Hum/Noise	- 40dB or better	
2.6	Adjacent Channel Power	- 60dB or better	
2.7	Audio distortion	Less than 3%	
2.8	Audio Response	+ 1 , -3dB	
3. RECEIVER			
3.1	Selectivity (Analog)	0.3 μ V(12 dB SINAD)or better	
3.2	Sensitivity (digital)	0.3 μ V at 5% BER or better	
3.3	Image Rejection	65dB or better	
3.4	Adjacent Chanel Selectivity	60dB or better	
3.5	Inter - modulation	70dB or better	
3.6	Audio distortion	Less than 3%	
4. ENVIRONMENTAL			
(i) Operating temperature : -30°C to + 55°C			
(ii) Storage temperature : -40°C to + 70° C			
(iii) Humidity: 95%Max. at +40°C non-condensing			
5. Accessories			
5.1	Battery cable & Mounting fixtures	Should be supplied with Repeater	
5.2	Antenna	6dB gain Omni Directional antenna with 30 meter RF Cable RG-217 for base station will be provided as per user's requirements.	
5.3	Programming Kit	All necessary Software and Hardware required for programming of the set independently. Software must support latest Windows OS	
5.4	Literature	i) Users manual with each radio sets should be provided free of cost in soft as well as hard copy. ii) Technical repairing & maintenance manual with complete block diagram in soft as well as hard copy.	

		<u>Quantity</u> 4 Nos.
IV. HF Static Transceivers		
1.1 General Specification		
1	Frequency Range	2.0 MHz to 29.9999 MHz with 100 Channel Spacing and 10 Hz Resolution.
2	Modes	SSB (J3E) USB, LSB, AM/AM(E), CW/MCW, AFSK
3	Preset	100 Channels or more
4	Frequency Stability	± 1 PPM or better
5	Built-in-test	Front panel testing.
6	Input Power	+ 12 V OR 24V \pm DC Nominal & 230V \pm 10% AC
7	Power Consumption	≤ 40 W in Receive & ≤ 450 W in Transmit
8	EMI/EMC	MIL-STD-461/462C or ETSI or CISPR 22 or IEC 61000-4 Series (TEC/EMI/TEL-001/01 FEB-09) or latest standard
9	Weight	Less than 17 KG
10	Antenna Impedance	50 Ω Unbalanced
11	Protection	(i) Reverse Polarity protection (without fuse) (ii) Protection against high VSWR. (iii) Over Voltage and under Voltage Protection.
12	Roles	Fixed/ Transportable/Mobile
13	Headphone Impedance	Up to 600 Ω
14	Cooling	Built in fan/Heat sink
15	VSWR	Better than 1.5
16	Visual display	Front panel LCD /LED display or latest technology
17	Interface	RS-232/USB
18	Programming	PC programming software and front panel Programming.
1.2 TRANSMITTER		
1	RF Power	20W to 100W PEP (Low, Medium, High) As per user requirement with programmable feature
2	Spurious Emission	≤ 40 db below PEP
3	Side Band Suppression	≥ 50 db or better
4	Carrier suppression	≥ 40 db or better
5	Inter modulation distortion	30db min. below PEP
6	Audio Response	Within 6db from 350Hz to 2700Hz.
7	Side Tone Level	Better than 0.1 mW into 150 Ω load for 5mV of audio input at 1 KHz.
8	Modulation Sensitivity	1 to 10mV at 1 KHz for full power under SSB mode.
1.3 RECEIVER		
1	Receiver Sensitivity	-107 dbm for 10db SINAD or better
2	Image Rejection	≥ 70 db or better
3	IF Rejection	≥ 70 db or better

4	In band Inter Modulation Distortion	35 dB minimum below PEP
5	Audio Response	Within ± 6 db from 350Hz to 2700Hz
6	Audio Output	1 W across loudspeaker or more
7	Audio Frequency Harmonics Distortion	≤ 25 db or better

1.4 Environmental

1	Operating Temperature	-30° C to + 55° C
2	Storage Temperature	-30° C to + 60° C
3	Humidity	95% non-condensing @ 40° C
4	Dust	} MIL-STD-810F or better Or JSS-55555 (As laid down I Class L3 of JSS-55555, revision No. 2)
5	Vibration	
6	Shock	
7	Altitude	

1.5 Features:

1	Selective calling	Digital FSK coding (4/6 digit select call)
2	Scanning	5 channels per second or better
3	Flash messages	Minimum 60 characters
4	Vocoder	MELP/ACLP (1200/2400 bps) or better
5	In built Data Modem	MIL-STD-188-110A/B/C single tone ≥ 4800 bps
6	GPS Interface	Inbuilt GPS with polling facility
7	Data Communication	Provision for data communication
8	Tele Call	The Radio set should have capability to dial and operate data
9	RS-232 control	The Radio set should have capability to operate at 4800 baud rate or better.
10	Tuneable receiver	Continuous tuneable.
11	Radio kill/ un-kill	Should have kill/un-kill function
12	Remote Operation	Capable to operate from remote location.
13	Audio input sockets	Mic and external socket.
14	Squelch	Voice/Digital squelch.
15	Push to talk.	Suitable Microphone to be provided

ESSENTIAL ACCESSORIES (To be Supplied With Set And Will be included in unit Price)

Battery lead

User manual

Microphone

Headphone

Morse key

Broad Band Antenna with 30 meter RF cable/ connector

Service/ Technical Manual

Programming Kit/software

Power Supply 12 Volt 30 AMP

V. Data Terminal**1 Nos.**

1	Computerised Data Communication Systems, AMSS software, Radio Modem UPS, Dot Matrix Printers, Spike Busters
2	Four-Port Data terminal Communication Equipments Minimum Hardware Specifications or Higher
3	Processor: Intel® Pentium® J3710 Processor (1.6 GHz, up to 2. 64 GHz, 2 MB cache, 4 cores)
4	HDD 1 TB 7200 rpm SATA
5	Memory 4 GB DDR3L-1600 SDRAM (1 x 4 GB)
6	Monitor Intel® HD Graphics
7	Chassis Compact & small
8	Serial Card with 4 dedicated ports which can be upgraded upto 8 port on single machine
9	Having provision for connectivity like RS 232, BEST, UHF/VHF/HF Radio Modems and PSTN ,POLNET
10	Having facility to connect Two Printers for Tx & Rx
11	Message Acknowledgement
	Software: Window based or above with license Having bilingual facility for message/data communication software for 4 port to provide following facilities :
	Message editor
	Message Scheduler
	Message Administrator
	On Screen Connection Status
	Log File Generation
	New Message Arrival indicator
	Should have different Folders for Received / Send/ Draft messages etc
12	Address Book facility
13	Should also support customized format of user.
14	Should support/work with Serial port interfaces such as BEST/ Radio/ V -Sat Terminal of POLNET/AMSS. The Communication software should be capable to interact with existing messaging system.
15	Must have provision to interface with LAN / Internet/ Intranet.
16	Software should have facility to send the binary files attachment through Radio Modem / V-Sat/ Internet/ Intranet.
17	Should have Acrobat Writer to avoid any editing on receipt of message attachment
18	Terminals at Control Room with Automatic Switching Software
18.1	In addition with above features. the offered software of the Terminals at Control Room should support the following:
	IP based protocols (SMTP & POP3) like UDP Multicast
	Multiple file (Binary) attachment
	LAN, V -Sat & Satellite Phone Connectivity
	Automatic Re-routing of message recd from remote terminals
	End- to- End Message acknowledgment
	Automatic Alternate Route Selection

	Message Transmission Priority
19	User and Administrator Password
20	The System Shall be compatible with the existing Data Communication system and existing HF sets of MPRO in respect of Data transmission/reception at the rate of 300 bps
21	The system shall be compatible with the existing Data Communication system and existing VHF sets of MPRO viz. PRM 8020, GM 300, GM 338, GM 950+ in respect of Data transmission/reception at rate up to 9600 bps.
22	UPS -650 VA offline UPS (Minimum 30 Min Backup on full load, Line Interface)
23	Data Interface Radio Modem HF/ VHF/ Radio Modem with Supply and necessary Interfaces for radio set along with set of cables (having 2 Radio Interface Port)
24	Automatic message switching software (AMSS) for 4-port operation
25	Dot Matrix Printer: DM Printer 24 pin 80 col 300 CPS at 10 CPI Dot Matrix Printer, One Parallel Capability of Printing of 1+3 copy
26	Electric Spike Buster

VHF/HF RADIO DATA MODEM

GENERAL		Tender Specifications	
1	Software Features	:	Support many interface including (HF/VHF/UHF)
		:	Support max.9600bps modem on VHF/UHF
		:	DOS as well as windows rich text printing
		:	End to End acknowledgement
2	Hardware Features	:	Fast Digital Signal Processor
		:	300,1200 and 9600 bps packet
		:	All standard HF and VHF modes
		:	Two switchable radio ports with rear panel AFSK adjustment and another for 9600 bps
	Technical Specification		
	Modulator		Phase continuous sinewave, AFSK generator
	Modulator output level		5-200mV RMS
	Power requirement		+12 to +16VDC @590mA (700mA recommended)
	Radio Interface		Two 5 pin connectors, front penal selectable
	Terminal Interface		RS-232-c 25 pin DB-25 connector
	Terminal data rate		Auto baud settings at 300,600,1200,2400,4800 &9600 bps

		<u>Quantity</u>
VI. AC Portable Generator Set		5 Nos.
i) Power	- 2500 Watts	
ii) Voltage	- 230 A.C	
iii) Engine Weight	- Approx 20kg	
iv) Engine HP	- 5.5 HP	
v) Phase	- Single	
vi) Altenator	- 2.5 kVA	

		<u>Quantity</u>
VII. AC Main Charger for 12 V Lead Acid Battery		5 Nos.
i) Battery Voltage	- 12 to 24	
ii) Product Type	- Automatic	
iii) Output Voltage	- 13.8 V	
iv) Current	- 15 A	
v) Voltage	- 230 A.C	
vi) Input Voltage	- 12 TO 24 V	